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(54) Title: SILICONE POLYMER AND ORGANIC POLYMER CONTAINING ALLOY AND/OR HYBRID EMULSION COMPOSITIONS

(57) Abstract: Emulsion compositions containing a silicone polymer and organic polymer as an alloy and/or hybrid emulsion can be made by (i) first forming an emulsion containing a silicone polymer by emulsion polymerization in which (a) the ring of a cyclic siloxane oligomer is opened, in which (b) an hydroxy endblocked siloxane oligomer is condensed, using an acid or base catalyst in the presence of water, or in which (c) an hydrogen endblocked siloxane oligomer and a vinyl endblocked siloxane oligomer are reacted by hydrosilylation using a catalyst; (ii) adding to the emulsion in (i) the components for preparing an emulsion containing an organic polymer by free radical emulsion polymerization of an ethylenically unsaturated organic monomer; and (iii) heating the emulsion. The resulting coalesced compositions produce polymer blends or alloys whose properties are influenced by the composition and morphology of the hybrid emulsion particles. The compositions may be spray dried whenever it is desired to employ the particles in powder type applications. In an embodiment, the two emulsions are prepared separately of one another and then combined.

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